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Amendments to the Specification

Please amend the paragraph at page 1, lines 4-11, in the following manner:

~~The present invention~~ This disclosure relates to a medical image diagnosing support apparatus and method for measuring body adipose of a subject based on a tomographic image of the subject acquired by a medical tomographic apparatus such as an X-ray CT (computed tomography) apparatus or an MRI (magnetic resonance imaging) apparatus. More particularly, the present invention relates to a medical image diagnosing support apparatus and method that can automatically separately measure subcutaneous adipose and visceral adipose using information on a periphery of adipose tissue such as muscle tissue of the subject.

Please amend the paragraphs at page 2, lines 1-22, in the following manner:

~~In order to achieve the above described problems, the present invention relates to~~ an aspect of this disclosure, there is provided a medical image diagnosing support apparatus comprising: a first extraction means which extracts a body region of a subject from a tomographic image of the subject acquired by a medical tomographic apparatus; a second extraction means which extracts a non-adipose region from the body region; a third extraction means which extracts a total body adipose region from the body region; a separation means which separates the total body adipose region into a visceral adipose region and a subcutaneous adipose region based on positional information of the non-adipose region; and a display control means which controls to display the tomographic image on an image display device with clear indication of the visceral adipose region and the subcutaneous adipose region.

~~The present invention also relates to~~ In another aspect of this disclosure, there is provided a medical image diagnosing support method comprising: a first extraction step of extracting a body region of a subject from a tomographic image of the subject acquired by a medical tomographic apparatus; a second extraction step of extracting a non-adipose region from the body region; a third extraction step of extracting a total body adipose region from the body region; a separation step of separating the total

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body adipose region into a visceral adipose region and a subcutaneous adipose region based on positional information of the non-adipose region; and a display control step of controlling of displaying the tomographic image on an image display device with clear indication of the visceral adipose region and the subcutaneous adipose region.

~~In the present invention, separation~~ Separation and measuring processing of the body adipose can be performed by following processing (1) to (7).

- (1) A body region is extracted from a tomographic image of a subject (the first extraction processing).
- (2) Each region of non-adipose regions such as an epidermal region, a muscle region, a bone region and the like is extracted (the second extraction processing).
- (3) The epidermal region (i.e., a region where epidermal tissue exists) which is extracted in the processing (2) is removed from the body region extracted in the processing (1).
- (4) The muscle region, the bone region and the like (non-adipose regions other than the epidermal region) are removed from the result of the processing (3). The result thus obtained is a total body adipose region. The processing (3) and (4) are the third extraction processing.

The total body adipose region is extracted from the body region by the above-described processing (1) to (4). That is, the epidermal region, which is one of non-adipose regions, is first removed from the body region, other non-adipose regions such as the muscle region, the bone region and the like are further removed from the result, and the total body adipose region is obtained by these processes.

- (5) An information of boundary of an abdominal region is set according to the position of information of the muscle and bone regions extracted in the processing (1).
- (6) A region where an inside of the abdominal region set in the processing (5) and the total adipose region extracted in the processing (4) overlap is set as a visceral adipose region in the abdominal region.
- (7) In the total adipose region extracted by the processing (1) to (6), a region other than the visceral adipose region in the abdominal region (that is, a region

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where an inside of the boundary of the abdominal region set in the processing (5) and the total body adipose region extracted in the processing (4) does not overlap) is set as a subcutaneous adipose region.

By the above-described processing (5) to (7), the total adipose region is separated to the visceral adipose region and the subcutaneous adipose region (a separating processing).

In ~~the present invention~~ this disclosure, "a non-adipose region" means a region other than an adipose region, i.e., an extraction of total fat area.

In ~~the present invention~~ this disclosure, "an adipose region" means a region obtained by removing the non-adipose region from the body adipose region.